

Spitzer Cores to Disks (c2d) Legacy Observations of Weak-line T Tauri Stars

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The “Cores to Disks” (c2d) Spitzer Legacy project will be observing ~ 170 weak-line T Tauri stars in and around the Ophiuchus, Lupus, Chamaeleon, and Taurus star-forming molecular clouds. These objects were specifically chosen as 1–10 Myr stars without IRAS or ISO detections. Our objective is to determine whether these young stars are diskless or have remnant disks which are below the detection threshold of previous infrared missions. Our Spitzer IRAC and MIPS observations provide 3.6–70 μm spectral energy distributions at unprecedented sensitivity. Preliminary MIPS results for the first few targets show stars with and without detectable 24 and 70 μm excess emission, which indicates the presence of dust in the terrestrial planet-forming region a few AU from the star. We will present the latest results of the survey as of July 2004.

